

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A revocation information transmission method used in a system including a plurality of ~~contents transmitting~~transceiver devices for transmitting and receiving contents through a network, and a plurality of ~~contents receiving~~reproduction devices for ~~receiving-reproducing the received contents-on-a network~~, the method comprising the steps of:

executing, ~~mutual by the transceiver devices~~, authentication between the plurality of ~~contents transmitting devices-and-of~~ the plurality of ~~contents receiving~~reproduction devices, respectively, where each of the ~~contents transmitting~~transceiver devices ~~reading~~reads authentication information of a respective one of the ~~contents-receiving~~reproduction devices;

individually uploading, from each of the transceiver devices through the network to a revocation integrator device, revocation information including key information of ~~mutual~~indicating an authentication failure ~~from each of the contents transmitting of a respective one of the individual reproduction devices-or each of the contents-receiving-devices-in case of mutual authentication failure to a revocation integrator-that is separate from the plurality of contents-transmitting-devices-and the plurality of contents-receiving-devices~~;

integrating, ~~by~~with the revocation integrator device, the revocation information uploaded from each of the ~~contents-transmitting~~transceiver devices ~~with the revocation information from each of the contents-transmitting-devices, as an integrated revocation list representing a common list of~~ revocation information for each of ~~revocations for the contents-receiving-devices-and the contents-transmitting the reproduction-devices-on-the-network~~;

packetizing the integrated revocation list and multiplexing the packetized revocation list into a stream; and

transmitting the stream to the contents ~~transmitting transceiver~~ devices on the network;

wherein each transceiver device utilizes, in the common list, other revocation information from other transceiver devices that previously uploaded revocation information to the revocation integrator device to:

a) deny unauthorized reproduction devices from reproducing the content when the unauthorized devices are included in the common list, and

b) allow authorized reproduction devices to reproduce the content when the authorized reproduction devices are not included in the common list~~the stream is an MPEG transport stream, and the integrated revocation list is transmitted by using a data structure of a section of the MPEG transport stream.~~

2.-3. (Cancelled).

4. (Previously Presented) The revocation information transmission method of claim 1, wherein the stream is an MPEG transport stream, and the integrated revocation list is transmitted by using a data structure of a PES packet of the MPEG transport stream.

5. (Previously Presented) The revocation information transmission method of claim 1, wherein the stream is an MPEG transport stream, and the integrated revocation list is transmitted by using a payload of a transport packet of the MPEG transport stream.

6. (Previously Presented) The revocation information transmission method of claim 1, wherein the integrated revocation list is transmitted by using an IP packet.

7.-8. (Cancelled).

9. (Currently Amended) A revocation information transmitting system comprising:

a plurality of ~~contents transmitting~~transceiver devices for transmitting and receiving contents through a network;

a plurality of ~~contents-receiving~~reproduction devices for receiving ~~reproducing~~
the received contents; which are respectively connected to the plurality of contents
transmitting devices;

wherein the transceiver devices include:

a first digital interface for outputting a compressed/expanded digital
signal ~~from the contents transmitting device to the contents~~
receiving~~reproduction device~~devices;

a second digital interface for ~~transmitting and receiving~~ authentication
information from the reproduction devices of the contents-receiving
device ~~between the contents transmitting device and the contents~~
receiving device;

a revocation integrator device on the network for receiving revocation
information uploaded from the plurality of ~~contents transmitting~~transceiver devices or
the plurality of contents-receiving devices in case of ~~mutual indicating an~~
authentication failure ~~between the contents transmitting devices and contents~~
receiving of a respective one of the reproduction devices;

~~an integrator that is separate from the plurality of contents transmitting~~
~~devices and the plurality of contents receiving devices that integrates~~the revocation
integrator device integrating the revocation information received from the
reproduction devices, as an integrated revocation list ~~from the contents transmitting~~
~~devices or the contents receiving devices, which is connected to the network, the~~
~~integrated revocation list representing a common list of revocations~~revocation
information for the contents-receiving devices and the contents transmitting each of
the reproduction devices on the network;

a multiplexer that multiplexes the integrated revocation list integrated by the
integrator and multiplexes it into a stream; and

a transmitter that transmits the stream,

wherein the stream is an MPEG transport stream, and the integrated revocation list is transmitted by using a data structure of a section of the MPEG transport stream, and

wherein each transceiver device utilizes, in the common list, other revocation information from other transceiver devices that previously uploaded revocation information to the revocation integrator device to:

a) deny unauthorized reproduction devices from reproducing the content when the unauthorized devices are included in the common list, and

b) allow authorized reproduction devices to reproduce the content when the authorized reproduction devices are not included in the common list.

10.-11. (Cancelled).

12. (Previously Presented) The revocation information transmitting apparatus of claim 9, wherein the stream is an MPEG transport stream, and the integrated revocation list is transmitted by using a data structure of a PES packet of the MPEG transport stream.

13. (Previously Presented) The revocation information transmitting apparatus of claim 9, wherein the stream is an MPEG transport stream, and the integrated revocation list is transmitted by using a payload of a transport packet of the MPEG transport stream.

14. (Previously Presented) The revocation information transmitting apparatus of claim 9, wherein the integrated revocation list is transmitted by using an IP packet.

15.-16. (Cancelled).

17. (Currently Amended) A revocation information transmission method including a plurality of transceiver devices for transmitting and receiving contents through a network, and a plurality of reproduction devices for reproducing the received contents, the method comprising the steps of:

~~executing, by the transceiver devices, mutual-authentication between contents transmitting equipment and contents receiving equipment of the reproduction devices, executed by the contents transmitting equipment which reads reading authentication information of the contents receiving equipment reproduction devices through a first digital interface; and~~

~~outputting uploading, by the transceiver devices, to a revocation integrator device, revocation information including key information of mutual authentication failure from the contents transmitting equipment or the contents receiving equipment in case of mutual authentication failure, of the reproduction devices; and~~

~~integrating, by the revocation integrator device, the revocation information uploaded from each of the transceiver devices as an integrated revocation list representing a common list of revocation information for each of the reproduction devices,~~

~~wherein the revocation information transmission method is used in a system comprising contents transmitting equipment for transmitting contents, contents receiving equipment for receiving contents, a second digital interface for outputting compressed/expanded digital signal from the contents transmitting equipment to the contents receiving equipment, the first digital interface connecting means for transmitting and receiving data between and connecting the contents transmitting equipment to the contents receiving equipment, and a revocation integrator that is separate from the contents transmitting equipment and the contents receiving equipment integrating the revocation information, as an integrated revocation list from the contents transmitting devices or the contents receiving devices, which is connected to the network, the integrated revocation list representing a common list of revocations for the contents receiving devices and the contents transmitting devices on the network;~~

wherein the integrated revocation list is transmitted from the revocation integrator to the ~~contents transmitting~~ transceiver devices using a data structure of a section of an MPEG transport stream,

wherein each transceiver device utilizes, in the common list, other revocation information from other transceiver devices that previously uploaded revocation information to the revocation integrator device to:

a) deny unauthorized reproduction devices from reproducing the content when the unauthorized devices are included in the common list, and

b) allow authorized reproduction devices to reproduce the content when the authorized reproduction devices are not included in the common list.

18. (Currently Amended) A revocation information managing apparatus comprising for use with a plurality of transceiver devices, connected to a network for transmitting and receiving contents between a plurality of reproduction devices for reproducing the received contents, the managing apparatus including:

~~— a plurality of contents transmitting equipments, connected to a network, for transmitting contents;~~

~~a plurality of contents receiving equipments, connected to a network, for receiving contents, which are respectively connected to the plurality of contents transmitting equipments;~~ a first digital interface for outputting—outputting a compressed/expanded digital signal from the contents—transmitting equipment~~transceiver devices~~ to the contents—receiving reproduction devices~~equipment~~;

a second digital interface for ~~transmitting—and—receiving authentication information of the contents receiving apparatus between the contents transmitting equipment and the contents receiving equipment~~from the reproduction devices;

an output for ~~outputting—uploading, to a revocation integrator device, revocation information including key information of mutual~~of an authentication failure from the contents transmitting equipment or the contents receiving equipment in case of failure in a mutual authentication between the contents transmitting equipment and the contents receiving equipment~~of the reproduction devices; and~~

a receiver for receiving an integrated revocation list ~~from a~~ from the revocation integrator device ~~that is separate from the plurality of contents transmitting equipment and the plurality of contents receiving equipment~~, the integrated revocation list representing a common list of ~~revocations for the contents receiving equipment and the contents transmitting equipment on the network~~ revocation information for each of the reproduction devices,

wherein the integrated revocation list is transmitted from the revocation integrator device to the ~~receiving means~~ transceiver devices using a data structure of a section of an MPEG transport stream, and

wherein each transceiver device utilizes, in the common list, other revocation information from other transceiver devices that previously uploaded revocation information to the revocation integrator device to:

a) deny unauthorized reproduction devices from reproducing the content when the unauthorized devices are included in the common list, and

b) allow authorized reproduction devices to reproduce the content when the authorized reproduction devices are not included in the common list.

19. (Currently Amended) The revocation information transmission method of claim 1, wherein:

one of the ~~contents transmitting~~ transceiver devices, as a first ~~contents transmitting~~ transceiver device includes a first digital interface for outputting a compressed/expanded digital signal to a respective one of the ~~contents receiving device~~ reproduction devices, as a first ~~contents receiving~~ reproduction device and a second digital interface for executing the mutual authentication between the first ~~contents transmitting~~ transceiver device and the first ~~contents receiving~~ reproduction device, the method further comprising:

receiving the stream by the first ~~contents transmitting~~ transceiver device; and

selectively outputting, via the first digital interface of the first ~~contents transmitting~~ transceiver device, the compressed/expanded digital signal to the first

~~contents-receivingreproduction~~ device responsive to the integrated revocation list received in the stream.

20. (Currently Amended) A revocation information transmission method used in a system including a plurality of ~~contents-transmittingtransceiver~~ devices for transmitting and receiving contents, and a plurality of ~~contents-receivingreproduction~~ devices for ~~receiving-reproducing the received contents-on-a-network~~, the method comprising the steps of:

~~executing, mutualby the transceiver devices, authentication between the plurality of contents-transmittingof the reproduction devices and the plurality of contents-receiving-devices, respectively, where each of the contents-transmittingtransceiver devices reading-reads authentication information of a respective one of the contents-receivingreproduction devices;~~

~~individually uploading, from each of the transceiver devices through the network to a revocation integrator device, revocation information including key information of mutualindicating an authentication failure of a respective one of the reproduction devicesfrom each of the contents-transmitting-devices or each of the contents-receiving-devices in case of mutual-authentication-failure to a revocation integrator that is separate from the plurality of contents-transmitting-devices and the plurality of contents-receiving-devices;~~

~~integrating, with-by the revocation integrator device, the revocation information from each of the contents-transmittingtransceiver devices with the revocation-information from each of the contents-transmitting-devices, as an integrated revocation list representing a common list of revocation information for each of the reproduction devicesrevocations for the contents-receiving-devices and the contents-transmitting-devices-on-the-network;~~

~~packetizing the integrated revocation list and multiplexing the packetized revocation list into a stream; and~~

~~transmitting the stream to the contents-transmittingtransceiver devices on the network,~~

wherein the stream is an MPEG transport stream, and the integrated revocation list is

- 1) transmitted by using a data structure of a section of the MPEG transport stream,
- 2) transmitted by using a payload of transport packet of the MPEG transport stream, and
- 3) transmitted by using an IP packet, and

wherein each transceiver device utilizes, in the common list, other revocation information from other transceiver devices that previously uploaded revocation information to the revocation integrator device to:

a) deny unauthorized reproduction devices from reproducing the content when the unauthorized devices are included in the common list, and

b) allow authorized reproduction devices to reproduce the content when the authorized reproduction devices are not included in the common list.